Remarks

By the above amendment, new claims 23-43 have been added to protect various additional embodiments for which protection is desired. No new matter has been entered. Accordingly, claims 1-43 are pending in this application.

Rejections under 103(a)

The Examiner has rejected claims 1-16 and 18-22 under 35 USC 103(a) as being unpatentable over Schmitz (EP 0,529,383 A2) in view of Hertrampf (US 6,021,912). Additionally, claim 17 has been rejected under 35 USC 103(a) as being unpatentable over Schmitz in view of Hertrampf, as applied to claim 1 above, and further in view of Dai (U.S. 6,044,995). These rejections are respectfully traversed.

In order to establish a prima facie case of obviousness, the Examiner has the burden of proving, by reasoning or evidence, that: 1) there is some suggestion or motivation, either in the reference itself or in the knowledge available in the art, to modify that reference's teachings; 2) there is a reasonable expectation on the part of the skilled practitioner that the modification or combination has a reasonable expectation of success; and 3) the prior art reference must teach or suggest all of the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Both the teaching or suggestion and the reasonable expectation of success must be found in the prior art and not based on an applicant's disclosure. *Id*.

In carrying this burden, the Examiner "must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious." Ex parte Clapp, 227 USPQ 972, 973 (PTOBPAI 1985). A rejection based on §103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. In re Warner, 154 USPQ 173, 178 (CCPA 1967). The Examiner may not, because she may doubt that the invention is patentable, resort to speculation, unfounded assumptions, or hindsight reconstruction to supply deficiencies in her required factual basis. Id.

In reviewing the Office Action, the Applicant doesn't share the Examiner's view it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the closure of Schmitz with the sealing olive, as taught by Hertrampf, in order to properly align the closure on the container when applied thereto. As a first point, both Schmitz and Hertrampf are concerned about solving the problem of over-pressurization and losing a proper seal. However, their approaches to solving these problems are opposite to each other. The approach employed by Schmitz is to provide a sealing strip 3 that firmly engages, via a springing action, the upper outside edge of the bottle neck 7, such that it does not lift off the bottle neck when received thereon. Over-pressurization is therefore not released by the closure of Schmitz. This is clearly stated by Schmitz in the paragraph starting at column 6, line 21 to column 6, line 31, the wording of which is the following:

"Annular grooves 9 and 10 provide a sufficient movability of the sealing strip 3 even in a situation in which the top plate 2 is almost or completely in touch with the end face 8c of the bottleneck 7. Still, according to the depiction in figure 4, there should be noted that the sealing strip provides just a minimum exposed area towards the pressure site (on the right-hand side in figure 4), such that even with a relatively large excess pressure there is no concern that the sealing strip 3 might be lifted off of the sealing face 8b."

Hertrampf, on the other hand, teaches that over-pressurization is avoided by letting the sealing part 4 deflect inward to allow the overpressure to escape. Column 4, line 39-45. Accordingly, in view of the above remarks, one skilled in the art would not be provided with the motivation to combined the references as suggested by the Examiner as Schmitz and Hertrampf teach two different approaches to solving the same problem, and thus must be considered as teach away from each other.

Additionally, even if the references where combined as suggested by the Examiner (even if no motivation), the resulting closure would fail to produce the recited invention, as the function of the resulting closure would be completely different from the recited screw closure of claims 1-22. In particular, the Examiner points to annular groove 9 as being the recited "weakened annular portion." Please note, the invention according to EP 529 383 was made when Schmitz was an employee of the legal predecessor of the assignee of record, wherein a limited production and the detailed development of the closure according to this document was made by the assignee of the present application, so that the applicant is very well aware of the details of disclosure and the functions of the various features thereof. That being said and considering the disclosure in Schmitz, it should be noted that the "annular grooves 9 and 10," as stated in column 6 of the description (reproduced in English above), are used for a completely different purpose then from the recited invention.

According to the aforementioned citation from Schmitz, one skilled in the related art would recognize that annular grooves 9 and 10 (as indicated in figures 1 and 2) only serve the purpose of allowing sufficient movability to the sealing strip 3, such that the sealing strip 3 is simply not torn away or pressed outwardly from its base, due to the engagement of the end face 8c of the bottleneck 7 with the inner face 2a of the top plate 2. The sealing strip 3 simply deviates towards groove 10 as the bottleneck 7 approaches the inner face 2a of the top plate 2, wherein groove 9 ensures that there always remains a certain distance from the sealing surface 8c and end face 8c of the bottleneck 7 from the base of the sealing strip 3 (compare figures 1, 2, and 4).

On basis of the aforementioned knowledge and as is further obvious to one skilled in the related art, it is to be appreciated that the end face 8c of the bottleneck of Schmitz therefore must abut the top plate 2 before any substantial radially outwardly directed stress is exerted on the base of the sealing strip 3 (i.e., where it adjoins the top plate), such as depicted in figure 4. This is clearly due to the two annular grooves 9, 10 on both sides of the sealing strip. Accordingly, there is no stress exerted on the top plate 2 in groove 9.

However, the situation is completely different with the present invention. In the present case, since the bottleneck is inherently restricted to axial movement only in between the outer sealing strip

and the inner sealing olive, as recited by the respective inner and outer diameter limitations in independent claims 1 and 20, there is a radially inwardly directed stress exerted on the top plate in the weakened annular portion via the engagement with the sealing olive, when received thereon.

Further, due to the recited arrangement of the closure independent claims 1 and 20, the movement of the bottle neck towards the axial direction is not restricted by abutment against the top plate as in the prior art, since the only portions of the closure which are recited to engage the end face (i.e., outer edge, outer wall, and inner surface) of the bottleneck are the sealing strip and the sealing olive, respectively, which are therefore spread apart when the bottle neck is received thereon. This means that the end face of the bottleneck when received on the closure may approach the base (i.e., where they are connected to the top plate) of both the scaling strip 4 and the scaling olive 3, unlike the cited prior art. Since that base portion is adjacent a top plate portion having a reduced thickness t, and since the principally unlimited (due to the lacking axial abutment) spreading of the sealing strip and the sealing olive, there is a substantial stress exerted on the weakened portion, which is a completely different action and function when compared to the closure of Schmitz.

Hertrampf, as well, does not yield a corresponding teaching because Hertrampf also provides an axial abutment for the end face of the bottleneck by means of an annular projection 9 defining the stop 10 and the mating stop 11 (cf. column 4, line 57 of Hertrampf). Accordingly, also Hertrampf fails to disclose a structure of a sealing strip and a sealing olive between which the bottleneck may be advanced without any axial stop means other than the narrow gap between the sealing strip and the sealing olive itself. Accordingly, the combination of Schmitz and Hertrampf, and also Dia (cited for the tamper band), would fail to produce the recited invention of claims 1-22, which arrangement of limitations provides the above mentioned type of a sealing action without any axial abutment.

In view of the above remarks, it is clear that no prima facia case of obviousness has been established, and it is therefore requested that the obviousness rejections to the claims 1-22 be withdrawn,

New claims 23-43

Support for new claims 23-43 is provided for by the specification and drawings, and thus no new matter has been entered. In view of the cited prior art, these claims are also believed patentable. In the recited closure of claim 23, the sealing strip and the sealing olive are arranged to engage the bottleneck at its inner surface and outer surface, respectively, so that the bottleneck is completely received within a hollow space and thus there is no axial abutment for the end face of the bottleneck. As explained above, no such feature as recited by independent claim 23 is disclosed by the cited prior art.

Conclusion

The applicant respectfully submits that, in view of the above amendments and remarks, the application is now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

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